ABSTRACT OF THE DISCLOSURE



A head-up display system comprising a transparent plate. A liquid crystal display generates a display light of information with a plane of polarization inclined by about 45° relative to an image plane vertical axis. A first optical rotation layer is disposed on a first surface of the transparent plate, and receives the display light from the liquid crystal display and optically rotates the plane of polarization of the display light by about 90°. A second optical rotation layer is between the image plane of the liquid crystal display and a second surface of the transparent plate, and optically rotates the plane of polarization of the display light by about 45° and allows S-polarized light to emanate toward the transparent plate at Brewster's angle. The S-polarized light is reflected on the second surface and is directed toward an eye of an operator.